ABSTRACT

A digital light processing projection system includes an illuminating device, an optical-path-switching element, a projection device and a prism set. The prism set is arranged between the illuminating device, the optical-path-switching element and the projection device and has a plurality of prisms in which an air gap existing between any two adjacent prisms. According to the invention, a light beam output from the illuminating device directly passes through the prisms and air gaps before being received by the optical-path-switching element. Under a first state, a light beam reflected from the optical-path-switching element is totally reflected at an interface between one of the prisms and one of the air gaps before being received by the projection lens. Under a second state, a light beam reflected from the optical-path-switching element is totally internal reflected back and forth within a prism being adjacent to the optical-path-switching element and is absorbed by a light absorbing material.